



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/397,494

09/15/1999

DAVID J. BALABAN

18547-037510

8817

33494

7590

11/07/2003

TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

WEST, JEFFREY R

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/397,494

Applicant(s)

BALABAN ET AL.

Examiner

Jeffrey R. West

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 26, 32, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,456,942 to Anderson.

Anderson discloses a method, and computer program on a medium for operation in a computer (column 6, lines 18-28), for a user interface to accept laboratory experiment information for control of a laboratory experiment, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system (Figure 2 and column 2, lines 53-67), the method comprising accepting signals from the user input device to define a parameter of an experiment (column 6, lines 35-37), transferring the parameter to the network (column 6, lines 37-39), receiving experiment results form the network, wherein the experiment results include results form an experiment using the parameter (column 6, lines 47-53), and displaying the experiment results on the display device (column 5, lines 18-

30). Anderson also discloses displaying steps for setting up the experiment functions (Figure 6 and column 3, lines 48-54) as well as the current progress of the sample results of the experiment during execution (column 4, lines 35-67).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-30, 32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,100,030 to McCasky Feazel et al. in view of U.S. Patent No. 6,456,942 to Anderson.

McCasky Feazel discloses the use of selective DNA fragment amplification products for hybridization-based genetic fingerprinting, marker assisted selection, and high-throughput screening for use in a laboratory experiment (abstract) comprising accepting signals/input data from a user input device, through a computer interface, inherently with associated instructions (column 43, lines 27-38), to define a parameter of an experiment, including data to define a probe array image identifier (column 50, lines 42-49 and column 52, lines 54-62) and a probe array analysis set and type (i.e. experiment ID, sample ID, and plate type) (column 44, lines 10-35) by displaying setup prompts on a corresponding display (column 44, line

60 to column 45, line 3, column 45, lines 52-63, and column 44, lines 10-35).

McCasky Feazel also discloses exporting/transferring the received parameters to a processor to generate experimental results (column 44, lines 36-38) and display the experimental results experiment/array images (column 53, lines 1-3), indicating hybridization information (column 3, lines 30-56), as well as displaying the current state of the experimental operation (column 49, lines 31-43). McCasky Feazel also discloses receiving from the user signals/data indicating a target output file (column 46, lines 3-18).

While McCasky Feazel does describe producing and exporting a target output file, McCasky Feazel does not specifically disclose conducting the experiment over a network (i.e. transferring parameters to a network and receiving experiential results from the network).

Anderson teaches a method, and computer program on a medium for operation in a computer (column 6, lines 18-28), for a user interface to accept laboratory experiment information for control of a laboratory experiment, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system (Figure 2 and column 2, lines 53-67), the method comprising accepting signals from the user input device to define a parameter of an experiment (column 6, lines 35-37), transferring the parameter to the network (column 6, lines 37-39), receiving experiment results form the network, wherein the experiment results include results form an experiment using the parameter (column 6, lines 47-

53), and displaying the experiment results on the display device (column 5, lines 18-30). Anderson also teaches displaying steps for setting up the experiment functions (Figure 6 and column 3, lines 48-54) as well as the current progress of the results of the experiment during execution (column 4, lines 35-67).

It would have been obvious to one having ordinary skill in the art to modify the invention of McCasky Feazel to include conducting the experiment over a network, as taught by Anderson, because, as suggested by Anderson, the combination would have provided a method for allowing the user to control the experimental equipment remotely while maintaining a full graphical display, updated in real time or near real time thereby providing opportunities to accurately, rapidly, and without an extensive user burden, evaluate large amounts of information (column 1, lines 31-46).

5. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCasky Feazel et al. in view of Anderson and further in view of U.S. Patent No. 6,355,423 to Rothberg et al.

As noted above, the invention of McCasky Feazel and Anderson teaches all the features of the claimed invention except for specifically providing a target database for publishing experiment results.

Rothberg teaches a method and device for measuring differential gene expression by retrieving specific types of sequence sets of nucleic acids in a sample simultaneously and in parallel by hybridization of additional subsequences to an array of probes of different types (column 6, lines 26-51) and interpreting the

Art Unit: 2857

sequence sets with reference to a database of known sequences (column 5, lines 7-27) wherein the user inputs information regarding the type of manipulations and comparisons that are to be executed (column 38, lines 20-39). Rothberg also teaches that the input/output devices for receiving input data, such as a specific probe types (column 24, lines 24-25), are connected to the processing device by way of a network (column 38, line 56 to column 39, line 7), such as a LAN (column 39, lines 35-43), as well as accepting signals for providing a connection to the Internet and/or database systems for publishing updated results (column 39, lines 26-34).

It would have been obvious to one having ordinary skill in the art to modify the invention of McCasky Feazel and Anderson to include specifically providing a target database for publishing experiment results, as taught by Rothberg, because McCasky Feezel does teach receiving from the user signals/data indicating a target output file (column 46, lines 3-18) and, as suggested by Rothberg, the combination would have provided a method for insuring that accurate data is accessed by allowing for the consistent updating of data (column 39, lines 8-34).

Response to Arguments

6. Applicant's arguments with respect to claims 26-32 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Art Unit: 2857

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw
November 3, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800